

REPLY

To: Examiner of the Patent Office

1. Identification of the International Application

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4. Date of Notification: 22.12.2004

5. Subject Matter of Reply: 1

In WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY, the subject matter of claims 12 to 14 is recognized to be not new and inventive because the document D1 (XP8035233) discloses (see fig. 2, 3): a ^{210}Pb collector which uses radon collection for collecting ^{210}Pb - ^{210}Po , which comprises a ^{222}Rn source which includes a substance including uranium radioactive nuclides; a moisture trap for collecting ^{222}Rn gas generated by the ^{222}Rn source along with a carrier gas and sending pure radon gas to a cold trap; and a ^{222}Rn collector trap for liquefying the ^{222}Rn gas by cooling to a temperature below the boiling point of ^{222}Rn and then generating ^{210}Pb and ^{210}Po .

Further, the authority has recognized that D1 discloses an assembly showing all the additional features of dependent claims 13 to 14, which therefore are not new.

However, the applicants cannot accept such recognitions and the reasons are explained below.

The document D1 is the publication containing the content in which the applicants are presented in the international congress, Asia-Pacific Symposium on Radiochemistry (2001) at Fukuoka. However, the conditions of the collection set forth in the claims of the present application are not yet clarified at this time. Figure 3 in the document D1 has the same constitution of the figure of the present application, however, as compared with the drive conditions of the apparatus of the document, the drive conditions of the apparatus of the

present application are more clarified. In the document, the drive conditions of the apparatus of Figure 2 and 3 are merely disclosed in page 208 and page 209, upper right column. Particularly, the drive conditions of the apparatus of Figure 3 are not concretely disclosed in the document D1. On the other hand, the concrete drive conditions of Figure 1 in the present invention are described in the present specification, page 7, line 2 to page 10, line 12. Claims 12 to 14 are defined such concrete conditions.

As to Figure 2 in the document D1 indicated by the authority, ²²²Rn collection portion is not identical with the ²²²Rn collection portion in Figure 1 of the present application.

The ²²²Rn collection tube of Figure 2 contains the silicone oil as cold trap agent while the ²²²Rn collection tube of the present application does not contain cold trap agent such as silicone oil. Further, as clearly seen from Figure 2 of the document D1 as compared with Figure 1 of the present application, both constitutions of the moisture trap and the ²²²Rn collection tube are not identical with each other.

Accordingly, the present invention according to claims 12 to 14 is different from the invention of the document D1 and is not obvious over the document D1, and therefore, the present invention is new and inventive.